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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,495	09/24/2003	Nir N. Shavit	6000-31700	7998

7590 05/14/2007
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EXAMINER

WALTER, CRAIG E

ART UNIT	PAPER NUMBER
2188	

MAIL DATE	DELIVERY MODE
05/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/670,495

Applicant(s)

SHAVIT ET AL.

Examiner

Craig E. Walter

Art Unit

2188

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 30 April 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

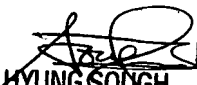
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☒ Newly proposed or amended claim(s) 21,22,24-26,28-33 and 111-118 would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: 21,22,24-26,28-33,111-118.
Claim(s) objected to: 10,12,13,56,58 and 59.
Claim(s) rejected: 1-9,11,14-20,52-55,57 and 60-66.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

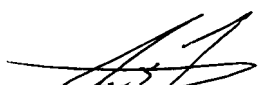
8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____


HYUNG SOUGH
SUPERVISORY PATENT EXAMINER

5-10-07


Craig E. Walter
Examiner Art Unit 2188

Continuation of 11. does NOT place the application in condition for allowance because: Applicant amended claim 21 to incorporate previously indicated allowable subject matter, hence this claim, and all claims that depend on claim 21, are deemed allowable. Applicant has added claims 111-118 to incorporate previously indicated allowable subject matter, hence these claims are deemed allowable. Applicant amended claims 1, 9, 24 and 28-30 overcome the objections set forth against these claims due to minor informalities. Applicant's arguments with respect to claims 1 and 52 (35 U.S.C. § 103) were fully considered by Examiner, however they are not persuasive. More specifically, Applicant contends that Afek in view of MacGregor fails to teach or suggest using a pair of single-location synchronizations to ensure that the first application value remains unchanged across the snapshotting. Applicant does challenge MacGregor's disclosure as teaching this limitation (as previously asserted by Examiner), but rather asserts that Afek in view of MacGregor would not result in or suggest a system that included using a pair of single-location synchronizations to ensure that the first application value remains unchanged across the snapshotting. More specifically, Applicant asserts, "[i]f Afek and MacGregor were combined as suggested by the Examiner, the resulting system would perform a scan procedure as taught by Afek and would use compare and swap instructions when actually updating a location. The combination would not include using a pair of single-location synchronizations to ensure that the first application value remains unchanged across snapshotting."

This argument however is not persuasive. Examiner clearly asserts within the previous correspondence that Afek teaches ensuring that the first application value remains unchanged across said snapshotting (page 878, "observation 1." through page 879, "observation 2"- two successive collect operations must be performed before a snapshot will occur) - see paragraph 006, rejection of claim 1. The only deficiency of his teachings as asserted by Examiner is that this step does not occur via a pair of single-location synchronizations. As previously discussed by Examiner, by using MacGregor's compare and swap operations, Afek would benefit by having a means of synthesizing and snapshotting complex data structures such as doubly-linked lists.

Lastly, Applicant asserts, "[there] would be no reason to modify Afek to "include MacGregor's compare and swap method." Afek specifically teaches the use of atomic registers. Afek states that his system "requires that any snapshot implementation be constructed with single-writer, multireader atomic registers as the only shared objects." The fact that Afek's system requires atomic registers completely obviates any need and any benefit to using MacGregor's compare and swap instructions."

This argument however is not persuasive. First, upon thorough review of Afek's disclosure, Examiner could not find Afek's alleged teachings that his system "requires that any snapshot implementation be constructed with single-writer, multireader atomic registers as the only shared objects". Secondly, assuming Afek does explicitly teach that his system ""requires that any snapshot implementation be constructed with single-writer, multireader atomic registers as the only shared objects" as suggested by Applicant, such a teaching would not necessarily preclude MacGregor and Afek's teachings from being combined. More specifically, by exploiting the benefits of MacGregor's compare and swap operations, Afek can ensure consistency of data during snapshotting of complex data structures such as doubly-linked lists.